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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,776	09/12/2003	Ji Heon Pyeong	IK-0028A	5765
34610	7590	09/06/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			SNIDER, THERESA T	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/660,776		HEON PYEONG, JI	
	<b>Examiner</b>		<b>Art Unit</b>	
	Theresa T. Snider		1744	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-27 and 36-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-27, 36-45 and 47-51 is/are rejected.
- 7) ☒ Claim(s) 46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/989,460.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/12/03, 7/12/06</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Priority***

1. It is noted that this application appears to claim subject matter disclosed in prior Application No. 09/989,460, filed 11/21/2001. A reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an

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unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/989,460, filed on 11/21/2001. ***Specification***

3. The abstract of the disclosure is objected to because of the inclusion of legal phraseology; lines 6 and 8, 'means'. Correction is required. See MPEP § 608.01(b).

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4. The disclosure is objected to because of the following informalities: page 10, line 17, 'produce' should be replaced with 'produced'.

Appropriate correction is required.

### ***Claim Objections***

5. Claims 24-25 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims fail to further structurally limit the device but rather defines a function of use thereof.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 14-27 and 36-51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Page 9, lines 11-19 discloses air introduced into 146 and air discharging through 145. HOWEVER, according to figure 5, it appears 145 is connected to 146. It is unclear as to how air can be both introduced and discharged from the same location.

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8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 22, 27, 44 and 51 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to which additional elements and their structural relationship to each other and the previously recited elements are needed to have the vacuum cleaner.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 23, 25-27, 36-40, 44-45, 47 and 51 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dyson.

Dyson discloses a lower casing (fig. 1, #14).

Dyson discloses an upper casing (fig. 1, #16).

Dyson discloses a motor housing in the lower casing (fig. 1, #24).

Dyson discloses an inlet (fig. 1, #20).

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Dyson discloses a filtering device (fig. 1, #22).

Dyson discloses a discharge outlet (col. 2, lines 17-18).

With respect to claim 25, Dyson discloses an outlet in an upper portion of the filtering device (fig. 1, unnumbered tube/opening above the number 22).

With respect to claims 26, 39 and 45, Dyson discloses the motor housing provided in one portion and the filtering device in an opposing portion (fig. 1, #22,24).

With respect to claims 27, 44 and 51, Dyson discloses a vacuum cleaner (title).

With respect to claim 36, Dyson discloses the motor oriented vertically (fig. 1, #24).

With respect to claims 37-38, Dyson discloses an inlet at a front portion of the collection chamber and canister (fig. 1, #20).

With respect to claims 40 and 47, Dyson discloses a cover positioned intermediate the upper casing and the motor housing (fig. 1, unnumbered element on top of large circle at #24).

12. Claims 36-39 and 44 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Tingle.

Tingle discloses a canister formed by a lower casing and an upper casing to form a chamber with a first portion serving as a collection chamber and a second portion serving as a motor housing (fig. 2, #14,10,36,16).

Tingle discloses a motor located within the motor housing and oriented vertically (fig. 2, #16).

With respect to claims 37-38, Tingle discloses an inlet at a front portion of the collection chamber and canister (fig. 1, #40).



With respect to claim 39, Tingle discloses the motor housing provided in one portion and the filtering device in an opposing portion (fig. 2, #16,36).

With respect to claim 44, Tingle discloses a vacuum cleaner (abstract).

13. Claims 36, 38-41, 44, 47-48 and 51 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Andersson-Sason.

Andersson-Sason discloses a canister formed by a lower casing and an upper casing to form a chamber with a first portion serving as a collection chamber and a second portion serving as a motor housing (fig. 4, #12,13,15,25).

Andersson-Sason discloses a motor located within the motor housing and oriented vertically (fig. 4, #21).

With respect to claim 38, Andersson-Sason discloses an inlet at a front portion of the collection canister (fig. 4, #27).

With respect to claims 39 and 45, Andersson-Sason discloses the first portion provided in one portion and the second portion in an opposing portion (fig. 4, #15,25).

With respect to claims 40 and 47, Andersson-Sason discloses a cover positioned intermediate the upper casing and the motor housing and filtering chamber (fig. 4, #12,14,15,25).

With respect to claims 41 and 48, Andersson-Sason discloses the cover covers both the motor housing and the filtering chamber (fig. 4, #14).

With respect to claims 44 and 51, Andersson-Sason discloses a vacuum cleaner (title).



***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. Claims 14-20, 22, 42, 49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson-Sason in view of The Admitted State of the Prior Art as shown in figure 2(hereafter ASPA).

Andersson-Sason discloses a similar device however fails to disclose a damper.

Andersson-Sason discloses a lower casing (fig. 4, #13).

Andersson-Sason discloses a motor housing installed in the lower casing (fig. 4, #21).

Andersson-Sason discloses a cover configured to cover the motor housing (fig. 4, #14).

With respect to claims 14, 42 and 49, Andersson-Sason discloses an outlet in the cover however fails to disclose a damper (fig. 4, #26). ASPA discloses the placement of a damper in the cover of a housing (fig. 2, #28a). It would have been obvious to one of

ordinary skill in the art to provide the damper of ASPA in Andersson-Sason to allow for regulation of the flow of air through the outlet.

With respect to claim 15, Andersson-Sason discloses an upper casing (fig. 4, #12).

With respect to claim 16, Andersson-Sason discloses a filtering chamber in the lower casing (fig. 4, #15).

With respect to claim 17, Andersson-Sason discloses a filtering device in the filtering chamber (fig. 4, #20).

With respect to claims 18, Andersson-Sason discloses the cover covers both the motor housing and the filtering chamber (fig. 4, #14).

With respect to claim 19, Andersson-Sason discloses the cover is positioned intermediate the upper casing and the motor housing and filtering chamber (fig. 4, #12,14,15,25).

With respect to claim 20, Andersson-Sason discloses the motor housing provided in one portion and the filtering device in an opposing portion (fig. 4, #15,25).

With respect to claim 22, Andersson-Sason discloses a vacuum cleaner (title).

17. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson-Sason in view of ASPA as applied to claim 14 above, and further in view of EP0344136.

Andersson-Sason in view of ASPA discloses a similar device however fails to disclose a pressure sensor on the cover.

EP0344136 discloses a pressure sensor in an upper wall of the motor housing (fig. #22,15). It would have been obvious to one of ordinary skill in the art to provide the pressure sensor of EP0344136 in the motor housing of Andersson-Sason in view of

ASPA to allow for control of the motor when the pressure therein exceeds a predetermined level.

18. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dyson as applied to claim 23 above, and further in view of Yung.

Dyson discloses a similar device however fails to disclose a filter.

Yung discloses a filtering device that separates air due to gravity having a filter (fig. 6, #68). It would have been obvious to one of ordinary skill in the art to provide the filter of Yung in Dyson to ensure for the most effective separation of dirt from the air.

19. Claims 43 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson-Sason as applied to claim 38 above, and further in view of EP0344136.

Andersson-Sason discloses a similar device however fails to disclose a pressure sensor on the cover.

EP0344136 discloses a pressure sensor in an upper wall of the motor housing (fig. #22,15). It would have been obvious to one of ordinary skill in the art to provide the pressure sensor of EP0344136 in the motor housing of Andersson-Sason to allow for control of the motor when the pressure therein exceeds a predetermined level.

***Allowable Subject Matter***

20. Claim 46 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

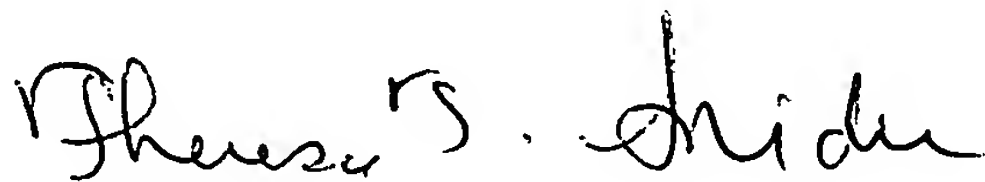
21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Driessen et al., Jepson et al. Contant, Tatge, Nuffer et al. and Lindquist disclose devices having a collection chamber and a motor housing with the motor oriented vertically.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Friday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read "Theresa T. Snider". The signature is written in a cursive, flowing style.

Theresa T. Snider  
Primary Examiner  
Art Unit 1744

8/29/06